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COMMUNIAY ESACRION TO ATROPASE MOSSE AT SOCIAL SURVEY HAMIAT

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COMMUNITY REACTION TO AIRCRAFT NOISE

V. SOCIAL SURVEY MANUAL

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Prepared on behalf of:

Aircraft Noise Social Survey Ad Hoc Working Group

		Page
SECTION 1	INTRODUCTION	2
SECTION 2	NOISE EXPOSURE AND SUBJECTIVE REACTION	3
	2.1 Measurement of Aircraft Noise Exposure	3
	2.2 Subjective Reaction to Aircraft Noise	3
SECTION 3	SAMPLING PROCEDURES	6
	3.1 Sample Size and Structure	6
	3.2 Sample Selection	6
	3.3 Control Sample	8
SECTION 4	INTERVIEWING PROCEDURES	9
	4.1 General Considerations	9
	4.2 Rating Scales & Opinion Thermometer	9
	4.3 Recording Responses	11
	4.4 Interviewing Techniques	11
SECTION 5	THE INTERVIEW SCHEDULE	13
	5.1 Questionnaire Development	13
	5.2 Conceptual Summary	13
	5.3 Notes on the Questions	14
SECTION 6	FIELD PROCEDURES	21
	6.1 Address Lists	21
	6.2 Contact Procedures	21
	6.3 Scope and Refusal	23
	6.4 Note on Adherence to Scientific Procedures	24
ADDENNTY	THE INTERVIEW SCUENILE	25

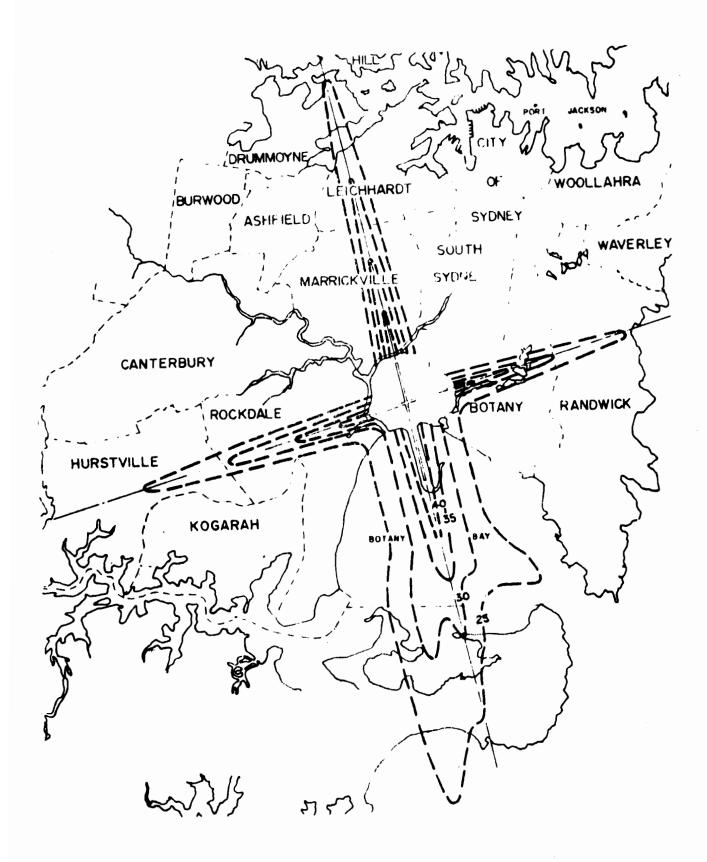


Figure 1. 1976 NEF Contours around Sydney Airport.

sleeping, etc. Other possible reactions to aircraft noise include feeling afraid and experiencing symptoms relating to physical and psychological health.

In measuring subjective reaction to aircraft noise it is necessary to use psychological scales which rank individuals along a continuum on the various dimensions of response. The present questionnaire has been designed according to the measurement procedures of Likert scaling. A Likert scale consists of several items for which there are several response categories one of which is endorsed by the respondent. Each category is assigned a score, and the respondent's overall score on the scale is the sum of the scores of the categories endorsed for each item.

There are a number of scales to be used in the present study. Most of them consist of items for which the respondent gives a rating between 0 and 10 using an 'opinion thermometer' (See Section 4.2). For example, the annoyance scale consists of the ratings of subjective annoyance given in three questions (viz., Q.10 xi, Q.15 iii, and Q.20; See Appendix). A respondent's score on this scale is the sum of the three ratings. Other scales of this type are a noise sensitivity scale (Q.10 ii, iii, vi, ix, xiii, xv), an annoyance susceptibility scale (Q.10 i, iv, v, vii, viii, x, xii, xiv, xvi), and a scale of general reaction (Q.17 and Q.38).

In addition there is a neutral scale of general reaction comprised of items scored on a 0/1 basis according to whether or not the respondent mentions aircraft noise (viz., Q.4, Q.5 vii, Q.6 and Q.13 and Q.16). Also, the ten items in Q.37 are scored 0-4 and comprise a scale designed to measure attitude towards aviation. Other variables involved in subjective reaction are to be assessed by single ratings such as those in Q.23, Q.25B and Q.35. Although these various measures have been empirically developed on the basis of the results from the pilot study, their reliability has to be established from the results of the main study before they can be applied in the analysis.

 ${\hbox{NOTE}}$ The Noise Exposure Index (NEI) is calculated in the same way as the NEF except that it is based on <u>actual</u> rather than forecast aircraft movements.

SECTION 3. SAMPLING PROCEDURES

3.1 Sample Size and Structure

The survey area includes all dwellings around Sydney, Richmond, Adelaide, Perth and Melbourne airports which have a nominal 1978 NEF greater than 25, together with some dwellings lying outside, but close to, the 25 NEF contour. There are approximately 40,000 dwellings in this area. In addition, some dwellings which are geographically close to the exposed areas, but which have very low nominal aircraft noise exposure, have been chosen as "control" areas.

The sample can be technically described as a two-stage cluster sample of the dwellings defined above, stratified by NEF and aircraft flight-path (See Section 3.2). One randomly-selected resident is to interviewed at each dwelling in the sample (See Section 6.2). The influence of the number of residents at a particular dwelling on the responses obtained will be investigated, and, if necessary, this factor will be included in the survey analysis. Thus, the sample is effectively a random sample of individuals.

An area lying under one aircraft flight-path and inside one 5-unit NEF zone (for instance, between 30 NEF and 35 NEF) is termed an "exposure zone". Since the number of dwellings in an exposure zone varies considerably between airports in the survey, it was necessary to adjust the number of dwellings sampled. Details of the sampling rates for each airport are given in Table 1.

3.2 Sample Selection

Nominal 1978 NEF contours were superimposed on aerial photographs and orthophotomaps (scale = 1:10,000) of all the areas to be surveyed. In heavily built-up areas, 1:2,000 scale orthophotomaps were used where available. Each exposure zone was divided into "sample blocks" containing not less than 75 residences (the average was approximately 110), and the number of dwellings in each block was counted. In this process, Australian Bureau of Statistics census data giving the number of dwellings in each census district, and the proportions of flats and home units, proved valuable. Sample blocks outside but adjacent to the 25 NEF contour were also included; these are described as lying in the 20-25 NEF zone.

At Melbourne, some possible sample areas were excluded, as they fell inside the 20 NEF contour for Essendon, a nearby general aviation airport.

The required numbers of sample blocks in each exposure zone were randomly selected, with probability proportional to the number of dwellings counted in the block. The addresses of all dwellings in each selected block were then listed by field observation. At the same time, the presence of any structure which could shield the dwelling from aircraft noise, or reflect sound onto it, was noted.

Twenty-five dwellings were then randomly selected in each block, under the conditions that they be as near to each other as possible, but that there be at least two other dwellings between any two sampled dwellings.

Table 1. Breakdown of Survey Sample

AIRPORT	Number Exp os ure (NEI x	Zones	Number of Sample Blocks per Zone*	Total Number of Sample Blocks	Required Number of Dwellings per Sample Block*	Approx. Number of Dwellings in Sample
SYDNEY	15		7	90	16	1430
RICHMOND	7		3	20	14	265
PERTH	13		3	38	16	600
ADELAIDE	12		4	39	14	560
MELBOURNE	4		5	20	15	300
Sydney Control	-		_	7	16	112
Richmond Control	-		-	2	16	32
Perth Control	-		-	3	16	48
Adelaide Control	-		-	4	14	56
Melbourne Control	-		-	2	15	30
						3433

^{*} NOTE. Because of the relatively small numbers of dwellings in the higher exposure areas, there are fewer than the stated number of dwellings in some sample blocks and fewer than the stated number of sample blocks in some exposure zones.

This was done by dividing the block into "strings" - lists of dwellings, in the order in which they occur, in a street block or part thereof. Strings were ordered so that nearby strings were near each other in order. One string was then randomly selected, with probability proportional to size, and a dwelling selected in that string. From here, every third dwelling in the string was taken to be in the sample. On reaching the end of this string, a random dwelling was selected in the next string, and every third dwelling from here was taken to be in the sample, returning to the beginning of the string on reaching the end. This process was continued until 25 dwellings had been selected. Dwellings in excess of the "required number" in the sample block were listed as "reserves" Section 6.2). At Perth and Richmond, some isolated farm-houses in rural areas were excluded from the sample for operational reasons. The definition was made that a string in an area which is not built-up must contain at least five dwellings, or otherwise would be excluded as being in a non-residential area.

In some exposure zones, particularly those with NEF > 35, there are not enough dwellings to make up the required numbers. Where the number of dwellings selected by the above procedure fell below 23 per block, every second dwelling, rather than every third, was selected. Even so, some blocks contain fewer than the required number of dwellings.

3.3 Control Sample

The areas between aircraft flight-paths which have very low nominal aircraft noise exposure were chosen as "control" areas. These areas were defined by rotating a NEF contour overlay 45° on a map.* The control areas can therefore be considered comparable to the sample areas in terms of distance from the airport, etc. The required number of blocks in these areas, as shown in Table 1, were chosen by selecting census districts with probability proportional to the number of dwellings which they contain. The chosen census districts were then regarded as blocks, and dwellings were listed and selected for the sample as described above.

At Richmond, only one group of dwellings was available for use as a control area. Dwellings in this group were listed and arbitrarily divided into two blocks. The dwellings to be included in the sample were then selected as above.

* NOTE: Because the runways at Perth airport are not at right angles, the contours in this case were rotated so as to bisect the angles between the flight paths.

SECTION 4. INTERVIEWING PROCEDURES

4.1 General Considerations

A major difficulty with this survey of community reaction to aircraft noise is that there has been considerable publicity, and many of the respondents will be aware of noise as an environmentalist issue. This introduces the problem of response bias insofar as people who are not really affected themselves may tend to exaggerate their responses if they have strong feelings about the issue.

To minimize the effects of such bias a neutral/prompted question strategy is used. The survey purports to be concerned with neighbourhood living conditions. The interview schedule (See Appendix) is structured so as to allow respondents to spontaneously mention and rate aircraft noise before being asked the main noise questions. Thus, the early questions are either open (e.g. Q4) or are neutral with respect to aircraft noise (e.g. Q5). Note that it is not until Q17 that the questions focus specifically on aircraft noise.

Interviewers have to be careful not to react in anything but a neutral way to the references to aircraft noise given in response to the early questions (See Section 4.4). The interview is presented as dealing with how people feel about neighbourhood living conditions. Strictly speaking this is not untrue: after all aircraft noise is a neighbourhood condition (note the wording used in Q13).

Even after the interview, it is important that respondents do not feel that they were misled and that the survey is really only about aircraft noise. It is best for interviewers and respondents alike to view the study as part of the 'Australian Government Community Survey' which is a long-term project investigating living conditions in various neighbourhoods throughout Australia. Should anyone complain of being misled it may be useful to point out that people are asked the questions about aircraft noise only if they report it as a neighbourhood condition they are dissatisfied with.

4.2 Rating Scales/Opinion Thermometer

Many of the questions require the respondent to give a rating. In some cases a simple rating scale is used (e.g. Q2: very good, fairly good, average, etc.). In these cases the interviewer shows the respondent a flash card listing the response categories one of which is to be endorsed. Interviewers have to elicit a response corresponding with one of the listed rating categories. If a respondent simply says 'good', for example, the interviewer would say "Is that very good or fairly good on the card?" A general probe to ensure that respondents properly use the flash cards is: "Which one would you say from the card?"

In other questions it is important that a larger number of response alternatives is available. To assist both the interviewer and the respondent an 'opinion thermometer' is used in these cases (See Figure 2). This consists of a flash card picturing a thermometer marked '0-10' with

five verbal descriptions ('none' to 'very much'). The respondent is instructed to give a number estimate of the rating and the interviewer

OPINION THERMOMETER

HOW MUCH

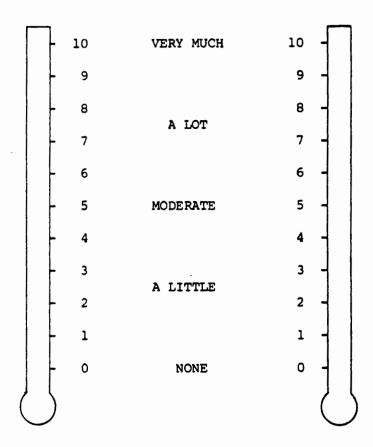


Figure 2. The opinion thermometer used for respondent ratings.

records this number (e.g. Q10). Respondents may need some encouragement to give a precise number to represent their rating. Some respondents may initially give a verbal label (e.g. 'very much') in which case a neutral probe is used (e.g. "which number is that?"). Or if the respondent says '2 or 3' the interviewer would probe "Which number should I write down?". However, the opinion thermometer has proved successful in previous surveys, and respondents will quickly adapt to using it properly.

4.3 Recording Responses

The interview schedule employs three methods for recording responses:

- i) <u>Pre-coded boxes</u> The most often used method entails the interviewer recording a response by ticking the box alongside the appropriate response category (e.g., Qs 1 & 2). The numbers beside the boxes are used for card punching as are the numbers in brackets in the right side margin.
- ii) <u>Dashed lines</u> A second recording method is used for open questions where a dashed line indicates that the interviewer is to record the response verbatim (e.g., Qs 3 & 4). It is important that interviewers record exactly what the respondent says without paraphrasing or correcting grammar, etc. Alongside most questions where there are dashed lines are boxes headed by the word 'Office' such items will be coded in the office and the boxes should be left blank.
- iii) <u>Coding boxes</u> The third method of recording applies for estimates where the interviewer has to write a number in the box (e.g., Q10). The instruction (Record:....) tells what and how to record in such cases. For example, in questions using the opinion thermometer interviewers are to write down the number estimate the respondent gives as a rating. Note that in this case the range of responses is 0-10 and a double box is provided for recording, so single digit responses are to be prefixed with '0' (e.g., the rating '6' is recorded as '06').

The 'Don't Know' (DK) response category is provided for almost every question, but this should rarely have to be used. Some respondents will say "I don't know" immediately in response to a difficult question. Encourage respondents to 'have a go', patiently reassuring them where necessary. Remind them that there are no correct answers and that you are interested in what they think and feel. Use neutral probes to elicit a response (e.g., "Even if you don't know for sure, what do you feel about it?"). Accept DK responses only if the respondent is still reluctant after attempts at gentle persuasion.

4.4 <u>Interviewing Technique</u>

As well as ensuring that the questions are asked exactly as they are written it is of paramount importance that interviewers guard against influencing the respondent via non-verbal cues. These include inflexions, pauses and emphasis in saying the words, facial expressions, postural changes etc., all of which can suggest to the respondent that a certain response is wanted. Remember that a nod or an apparent eagerness to record a response will be a cue. Also, if you say 'Hmm' in what you intend to be a completely neutral way, it may still serve to reinforce the response just given.

An interviewer's only concern should be to elicit ANY clear, complete and relevant response. This is comparitively simple for pre-coded questions where the response categories are listed on the interview schedule. But with open questions you may have to probe to get a definite response. Keep in mind that all relevant responses are equally acceptable so long as they are unambiguous. Use neutral probes, e.g., "Could you be more specific?" or "Which one is that on the card?"

Try to get the respondent to <u>talk freely</u> in response to open questions, rather than accepting one-word answers. If the respondent gets side-tracked record the response but ask the question again. For example, in Q3 about neighbourhood features that are liked, some respondents will immediately say what they dislike. Record these responses but probe what is liked, and still ask Q4 about features disliked. Avoid suggesting possible answers when probing.

If the respondent says he/she doesn't <u>understand the question</u> note this fact in the margin, and repeat the question encouraging the respondent to give an answer. To save time use the symbol 'X' to indicate that the respondent did not understand the question with an arrow pointing to the word or phrase that was unclear. Always put your own comments in brackets to distinguish them from the respondents'. If you are asked to <u>define</u> a term (e.g., 'neighbourhood') throw it back to the respondent by saying "Whatever you consider 'neighbourhood' to mean".

For pre-coded questions make sure that the answer corresponds with one of the listed response categories (e.g., Q2). Probe if you are at all uncertain which category applies. With open questions record everything the respondent says exactly as it is said. If you have trouble keeping up ask the respondent to go more slowly or to repeat - this can be done in such a way that the respondent perceives it as genuine interest on your part.

While it should be made clear that you are reading from a printed schedule do not let the respondent read the items or read what you record. When a flash card is used be sure to take the card book back at the end of the relevant question. Discourage respondents if they try to browse through the card book.

Probe to get <u>unambiguous</u> answers. For example, if the respondent says that one of the things disliked about the neighbourhood is the neighbours, probe by asking "What do you dislike about the neighbours?". We need to know whether the neighbours are too noisy, too nosey or what. (Of course you don't suggest such alternatives.) But be careful when probing on the early questions not to appear overly interested in aircraft noise.

From the outset assure respondents that you are in no way judging or assessing them, that there are no right or wrong answers, that their own opinions are all you want. Strive to establish <u>rapport</u> by presenting a professionally friendly manner and by adopting a conversational rather than an analytical style of questioning. But always avoid being drawn into conversation about your own opinions.

A good interviewer is able to guide the respondent in a <u>one-sided</u> <u>conversation</u> without appearing too artificial. In normal conversation people monitor both the verbal and non-verbal reactions they get to their ideas, and modify their expressions of ideas, accordingly. The interviewer must avoid any possible bias by reacting in a <u>consistently neutral</u> manner to whatever ideas the respondent expresses.

SECTION 5. THE INTERVIEW SCHEDULE

5.1 Questionnaire Development

Interviewers are to keep in mind that the questionnaire is <u>not</u> just a string of questions about aircraft noise. Rather, it is a scientifically designed tool for assessing the complex array of perceptions, feelings, attitudes and behaviours that comprise an individual's subjective reaction to aircraft noise. It is essential that interviewers be thoroughly trained in administering the schedule according to rigorous procedures.

The present questionnaire has taken twelve months to develop. It has undergone four revisions with several drafts for each. An earlier version was tested in a pilot survey of 160 residents around Sydney airport. The questionnaire was completely revised in the light of the pilot survey results, and of the feedback provided by the interviewers. Further revisions were made to take account of comments by a number of experts.

5.2 Conceptual Summary

The questionnaire was designed so that the questions follow a natural sequence from general questions on the neighbourhood to specific questions on aircraft noise, with classification information covered at the end of the schedule. It must be pointed out, however, that there were some restrictions on question order necessitated by the use of a neutral/prompted strategy (See Section 4.1).

The conceptual structure of the interview schedule can be seen from the following summary:

Questions	Topic
1-6	Attitudes towards neighbourhood
7-12	Neutral questions on health
10	Noise annoyance sensitivity scale
11	Time spent in exposure area
12	Perception of survey purpose
13-16	General noise questions
17-28	Aircraft noise: perception and reaction
29-39	Aircraft noise: behaviour and attitudes
40-45	Classification information

These included Dr. J.J. Ray, Prof. R. Rylander, Dr. S. Sörensen and officers of the Australian Bureau of Statistics. This assistance is gratefully acknowledged.

5.3 Notes on the Questions

Introduction This section outlines the purpose of each question and provides information on how the questions are to be administered in the interview. Specific notes are given on procedures for recording responses.

Question 1 This question is a straightforward 'ice-breaker'. It asks simply how long the respondent (R) has lived at the address. Even if R takes a little time working out precisely how many years do not suggest a "rough estimate" as this may be a cue to guessing throughout the interview. Rather, let the respondent give an estimate and tick the appropriate category. Probe if you are uncertain which category applies. For example, if R says "about 2 years" probe whether this means "1-2 years or 2-5 years". If the estimate seems to equal R's age and R does not volunteer "all my life", probe whether "all of life" is appropriate. (Note that Q.31 is omitted if the response here is "all of life".)

Question 2 This is a neutral question on satisfaction with the neighbourhood. It is important not only because it elicits an opinion unbiased by any specific reference to noise, but also because it introduces the respondent to the procedure for making a simple rating. Interviewers are to show the flash card but are still to read out the response categories listed in the schedule. Make sure R chooses one of the categories from the card. If, for example, R says "good" probe with "Would you say 'very good' or 'fairly good'?" An alternative probe would be the more general form "Would you please select one of the categories from the card".

Question 3 This and the next three questions are needed to get a perspective on how aircraft noise is perceived in relation to other neighbourhood conditions. Firstly, question 3 asks which features are liked about the area. Interviewers are to record everything that is said. When the respondent has finished his/her answer, the second part of the question is asked to ensure a complete answer. If R lists things disliked these are to be recorded in the space for the next question but that question is still to be asked.

Question 4 This is a crucial question which allows R to spontaneously mention aircraft noise as a feature disliked about the neighbourhood. Interviewers will have to be very careful not to react. Probe for a complete answer with the second part of the question, but be sure not to imply that something has been omitted if R does not mention aircraft noise. If R simply says "Noise" probe with "Could you be more specific?" but avoid appearing particularly interested in noise.

Question 5 This question asks R to rate a number of neighbourhood features. Obtain a rating for each feature in turn without making any reference to whether the features were given as responses to the two previous questions. Be consistent in the way you ask about each feature, making sure that you don't give any non-verbal cues, especially for the item about aircraft noise. If R wants to chat about the various features, record the comments but do not encourage the digression. At the appropriate moment interrupt with "What about...?" and go onto the next item.

- Question 6 The respondent is asked to select which one feature is most worth having improved. Encourage R to make a choice from the features on the flash card. If R insists on nominating more than one then record them in the order they are given.
- Question 7 This is the first of three questions designed to obtain an unbiased assessment of possible health effects. Question 7 simply asks for an overall rating of the respondent's health. Interviewers are to avoid getting drawn into lengthy explanations about why this question is being asked. If necessary, simply explain that the reason for asking about health will become clear in the next question, but ensure that R gives a rating here before asking Q.8.
- Question 8 The preamble to this question is important, for it serves to focus respondents on neighbourhood conditions which may affect their health. This is a neutral form of a later question specifically on aircraft noise (Q.25), and is needed for assessing possible response bias. If R answers "yes", ask part A with the probe given, and then ask part B. Interviewers must guard against giving non-verbal cues that might lead R to suspect that aircraft noise is of particular significance.
- Question 9 This is another neutral question on possible health effects aircraft noise is listed as one of several evnironmental conditions. Respondents are asked whether they think the various conditions might have influenced their health. Whenever a "yes" response is given, probe with "In what way...?". All the items are to be asked in a consistently neutral manner, and no emphasis or hesitation must occur with the item on aircraft noise.
- Question 10 This question is designed to assess respondents' sensitivity to noise annoyance and to general annoyance. A number of noise items are interspersed among other items all must be asked in the same way with no emphasis on the noise items. The opinion thermometer is introduced here. As the preamble is read interviewers are to point to the relevant parts of the opinion thermometer respondents will quickly understand its use. The opinion thermometer will be used frequently in later questions, and it is important that respondents become proficient in using it in this question. Note that the numbers '0-9' are recorded as '00-09' and that the code '12' is used if R reports never having been in the situation.
- Question 11 In this question \underline{R} is asked to state how many days per week he/she is at home in the morning/afternoon/evening. Obtain an estimate for each period in turn. Note that the 'DK' category is '9'. The information from this question will be used to determine whether the amount of time spent in the exposure area influences how much effect the noise has on an individual.
- Question 12 In case word has spread around the neighbourhood this question is needed to check on prior knowledge of the survey, which is a potential source of response bias. Interviewers are to ask the first part offhandedly and if a positive response is given, to follow-up immediately with the second part without seeming to be reading from the schedule. In other words, do not tick the 'yes' box until after you have asked "What had you heard?".

- This question aims to introduce the topic of noise without implying that the respondent has been previously misled (See Section 4.1). In this open question R is invited to specify the noises heard in the neighbourhood and is given the opportunity to nominate aircraft noise. Interviewers must make sure they are neutral in their reactions to the responses given, and when probing they must not imply that something has been omitted.
- Question 14 The respondent is asked to say whether or not various noises are ever heard. Some respondents can be expected to say "No" and then add something to the effect that they hear the noise but that it's not a problem. In such cases interviewers are to probe with "Do you ever hear noise from...around here?". If in doubt tick 'yes' this question is essentially a lead-in for the next question.
- Question 15 This question asks for an annoyance rating for the various neighbourhood noises. Ask about those noises for which the 'yes' box was ticked in the previous question. Avoid giving any emphasis to any of the items. For item 14 ix) read out the first of any 'other' noises specified in the previous question. Respondents should have no difficulty using the opinion thermometer to give their ratings.
- Question 16 This question is designed to determine which noise R finds most bothersome. It is an important question which is neutral with respect to aircraft noise but allows people the chance to nominate it as the most serious noise problem. Again, of course, interviewers have to guard against any possibility of bias through prompting. Encourage R to select one of the noises and record the item number from the flash card (note the number when you take the card back). Simply record the number without any comment or reaction.
- Question 17 This is the first of the questions directly on aircraft noise and is asked of all respondents. They are required to give a rating of how much they are affected overall this covers a more general reaction than annoyance. Those respondents who report being 'not at all affected' (i.e., give a zero rating) are not asked the next nineteen questions.
- NOTE Interviewers are to complete the item at the top of page 8. If a $\underline{\text{zero}}$ rating was given in Q.17 tick 'skip' and go to Q.37. If a $\underline{\text{non-zero}}$ rating was given tick 'continue' and proceed with the next question (Q.18).
- Question 18 This question asks respondents to state whether or not various activity disturbances are experienced as a result of aircraft noise. For 'other' (item viii) interviewers are to ask "Are there any other activities you find are disturbed by aircraft noise?".
- Question 19 This question is designed to find out which activity disturbance is most important to the respondent. Interviewers are to encourage \underline{R} to select one activity from the flash card. If \underline{R} insists on nominating more than one item, note them down, but enter in the coding box the first one mentioned.

- Question 20 The rating in this question concerns the annoyance felt overall because of activity disturbances. Although previous aircraft noise surveys have typically asked for ratings of annoyance from each activity disturbance, it is argued that the present general rating provides a more valid index of subjective reaction. In the analysis this rating will be combined with other ratings to form an annoyance scale (See Section 2.2).
- Question 22 This is a straightforward question on the respondent's reaction to aircraft noise, namely, whether or not a startle response is experienced. This reaction seems to relate more to feelings of fear rather than annoyance.
- Question 23 In this question respondents are required to give an opinion thermometer rating on how much they are frightened by aircraft noise. This rating will be used to assess the reaction of fear as distinct from annoyance.
- Question 24 This is essentially a question about perception. Respondents are asked whether or not they are bothered by various characteristics of the sound of aircraft noise.
- Question 25 This is the 'noise-prompted' form of an earlier neutral question (Q.8), although interviewers are not to draw attention to this fact. Respondents indicate whether or not they think aircraft noise has affected their health. If a positive response is given, respondents are asked firstly, in what way their health has been affected (Part A) and secondly, to rate how much it has been affected (Part B). Interviewers must avoid being drawn into discussion on the issue of health effects of noise.
- Question 26 This is not an easy question, but it has been found to cause no difficulty if interviewers read it carefully and fairly slowly. Respondents are asked if how they feel about aircraft noise is affected by the noisiest plane, the build-up of all planes or equally by both aspects. The data from this question will be useful for understanding more about the way in which noise affects people.
- Question 27 This is an important question concerning the time of day respondents find aircraft noise most bothersome. It asks which of eight 3-hour periods R would most like to have free from the noise of aircraft. Again, R should be encouraged to select one period. If R insists on more than one, interviewers are to note them down in the order R gives them, but to enter the first one in the coding box.
- Question 28 This question simply asks whether the respondent hears aircraft noise from the airport itself. This includes noise from ground-running, reverse-thrust braking and take-off thrust.

- Question 29 In this question on complaint behaviour respondents are asked whether they have ever done anything to have the noise reduced. Those who answer "yes" are asked to say what they did. However, only a small percentage of people affected by aircraft noise ever take any action about it. The question asked 'if no' is designed to find out why this is the case.
- Question 30 Another question on complaint. Respondents are asked whether they feel they would like to take any of a number of actions by way of complaint. They are not here being asked whether they have actually done or plan to do the things listed, although some respondents may interpret the question that way. In such a case interviewers are to repeat the operative part of the question (viz., "Do you feel you would like to...?").
- NOTE Before asking the next question, interviewers are to quickly check the response given in Q.l. If the response was 'all of life' then the next question (Q.31) is omitted.
- Question 31 The first part of this question asks whether R was aware of the noise before moving into the area. If the response is 'yes' then ask whether the noise was different from what was expected. The last part of the question is asked if R says 'no' to the first part or 'a bit more/much more' to the second part. Note that this question asks about the noise at the time R moved to the area it is not a comparison of the noise then versus now. Interviewers should accept a DK response to the last part of the question from young respondents who would not have had a say in the decision to move to the area.
- Question 32 This is a straightforward question on adaptation, inquiring whether the respondent has become used to aircraft noise. Interviewers are not to give any indication as to whether or not respondents are expected to have adapted to the noise.
- Question 33 In this question on change in the amount of aircraft noise, respondents are being asked to make a subjective judgment not a categorical statement of fact. If R says "I don't know", interviewers are to probe with "Even if you don't know for certain, how do you think the noise now compares with what it was before?". Note that the substitute phrase "since you moved here" is used if R has lived there for less than five years, as indicated in response to Q.1.
- Question 34 Many people think about moving house as a sort of vague wish for 'greener pastures'. This question asks whether R has seriously thought about moving. If R says 'yes' then ask the item on why he/she decided not to move. If R says 'no' ask the item on whether he/she would move if the noise increased, but be careful not to imply that it will increase. Again, with young respondents a DK response may be appropriate such people are not to report what their parents might do.
- Question 35 Fear of aircraft crashing is an important component of an individual's subjective reaction. However, it may not be the noise itself that is the operative factor, and this will be taken into account in the analysis. This question asks firstly, whether R has ever thought that a plane might crash in the area and secondly, if a positive response is given, for a rating of how much R feels afraid. Of course, interviewers must not imply that there is any danger and must avoid being side-tracked into discussion of aircraft safety.

- Question 36 This is a very important question on subjective rating of annoyance. It is crucial for the accurate interpretation of the opinion thermometer ratings. Respondents are asked to select which category describes their general feelings about the aircraft noise. Interviewers must not give any feedback about the ratings \underline{R} gave in previous questions.
- NOTE In those cases where the aircraft noise questions have been skipped, the interview resumes with the next question.
- Question 37 The extent to which an individual is affected by aircraft noise will depend in no small part on his/her attitudes towards the aviation industry (or the Airforce in the case of Richmond airport note that a slightly different form is used for Richmond respondents). This question consists of ten statements for which the respondent is required to indicate agreement or disagreement. Positive and negative attitude statements are mixed, but interviewers must take care to read each one in a neutral manner, with no hint as to their own opinions and no reaction to the responses given. If R simply says "yes" or "no" or uses any words other than those on the flash card, then interviewers are to probe by asking "Which one would you say from the card?". Some respondents may digress by trying to elaborate on the statements. In such cases, interviewers are not to discuss the matter but are to record any comments in the margin. Press on with the question by saying "The next statement is...".
- Question 38 This is the final rating item. It is designed to assess the general reaction of dissatisfaction with aircraft noise.
- Question 39 This is an open question inviting respondents to make any other comments about aircraft noise and about neighbourhood living conditions. Although it is not as important a question as some of the others, it may prove useful in providing insights into the variability of people's reactions to the environmental conditions in various neighbourhoods.
- Question 40 The last six questions are needed to gather 'classification' information. Most people will not object to supplying the 'personal' information sought, but some may need to be reminded that the information is confidential and that names are not being recorded. The first question in this section asks R to indicate his/her age category from a flash card. If R refuses, do not insist on a response but simply tick the appropriate box.
- Question 41 In this question on occupation interviewers are to make sure that an accurate description is given. Probe if a one-word response is given: "What sort of...?" (clerk, salesman, engineer, manager etc.). Probe further if the response is ambiguous (there is a story of a man who called himself a 'bank director'. His job was to usher customers in a bank!).
- Question 42 Interviewers must be careful not to omit this item. Tick whether the respondent is male or female.

- Question 43 This question asks about education level. The 'refuse' category is given here, but most people will not hesitate to answer from the flash card. If R is not sure of the category (e.g., overseas education) interviewers are to note the details and to leave the coding boxes blank. The probe about name of the institution is used if R says 'tertiary' (categories 5 or 6).
- Question 44 This is a simple question on home ownership. If the category 'other' is appropriate, interviewers are to note the details in the margin.
- Question 45 Interviewers are to complete this item on the type of dwelling. It is best to do so at the time of the interview rather than risking mistakes by relying on memory at a later time.
- NOTE Interviewers are to complete the interview by thanking the respondent for his/her co-operation and pointing out that the information will be of great value in planning future community improvements. It is important that respondents feel that their time and effort has been worthwhile and is appreciated. Where necessary, interviewers should re-assure respondents about the confidentiality of the information.

6.1 Address Lists

Each interviewer will be given a number of "address lists" each containing the addresses of up to 25 dwellings (See Figure 3). Each list is termed a "workload". Some workloads will contain fewer than the usual number of addresses for their area and in these cases the modifications required to the procedure described below will be explained individually. Each address is given a two-digit number, or "address code", from 01 to 25.

The first portion of the address list - address codes 01 to 16 in Sydney and Perth, 01 to 14 in Richmond, 01 to 14 in Adelaide and 01 to 15 in Melbourne - is referred to as the "primary list". Interviews are to be sought at ALL dwellings on the primary list. In the event of a non-contact, refusal or household beyond scope at one of the primary addresses (these terms are explained more precisely below), the first address on the "reserve list" is to be approached. If necessary, other reserve addresses are to be approached in the order in which they appear on the list. In the unlikely event that more reserve addresses are required, the interviewer should contact the office.

6.2 Contact Procedures

Up to five effective calls are to be made at each listed dwelling in order to establish contact with the occupants. Calls are to be made at different times including at least three evenings (5-8pm). The details of each call are to be noted on the Contact Record (back page of the interview schedule). Your aim should be to secure an interview not just to fulfil the criterion of five calls. If no contact has been made after five genuine attempts the details are recorded and a dwelling from the reserve list is approached. Do not approach dwellings that are not on the address list.

The first person you contact at an address is termed the 'informant'. This can be any household member who is able to supply information about household membership. The interviewer introduces himself/herself and then asks the informant how many of the occupants are over 18 years of age. The interviewer then asks who the members are and notes them down on the contact record sheet in the order stated by the informant (the member's relationship to the informant, as well as age and sex if necessary, is noted to permit identification of the respondent). The person to be interviewed is termed the 'respondent'. Note that the informant is not necessarily the respondent.

To select the respondent the interviewer consults the Respondent Selection Table. It is important that this is done after the household members have been listed on the contact record. To use the table the interviewer needs to know the address code and the Number of Eligible Household Members (i.e., the number of people that have been listed on the record sheet). The interviewer reads down the column headed "address code" and then across to the appropriate column under 'Number of Eligible Household Members' and circles the number in that box. This number indicates which 'Person Number' on the contact record sheet is to be the respondent.

AIRCRAFT NOISE SOCIAL SURVEY

ADDRESS LIST

PRIMARY LIST			Workload No.			
Address Code	Address	Result	Area:			
01			1		viewer:	
02						
					RESERVE LIST	
03			Ad C	dress ode	Address Result	
04				17		
05				18		
06				19		
07				20		
08				21		
09				22		
10				23		
11				24		
12				25		
13			Ì			
14						
15					Result Code	
16				No	ccessful / n Contact NC yond Scope BS fusal R	

Figure 3. Photo-reduced copy of address list.

Up to three more calls are to be made in order to obtain an interview with the selected respondent. You are not to interview the informant unless that person happens to be selected using the above procedure. If you did otherwise you would introduce bias which would seriously undermine the validity of the survey.

To help clarify the above contact procedures consider the following example. You first call at a listed address at 9.15am and find no-one at home. Note the time on the contact record sheet. When you call back at 6.30pm a woman answers the door. You have made contact at the dwelling and the woman is the informant. In reply to your introductory question she says there are five household members over 18, namely, her husband, her two sons (note ages: 19 and 22 years), her mother and herself. These people are listed on the contact record in the order the informant gave them. Then you consult the respondent selection table using the address code (say 04) and the number of eligible household members (in this case 5) to find the appropriate box which happens to contain the number 3. You circle this number on the table and then circle 'Person Number' 3 on the contact record sheet. This happens to be the 22 year old son. You ask to see the son only to be told that he is at a late class at university. You resist the temptation to save trouble and bias the survey by interviewing the woman at the door, and arrange to call back at a time when the son will be at home. When you call back as arranged you find the son on his way out. You then make an appointment for a mutually suitable time and note the details of your call on the contact record. You obtain the interview when you call back for the appointment.

After an interview has been completed, interviewers are to fill-in the front of the schedule (viz., workload no., address code, respondent's address, date, time interview started and finished, and interviewer's name).

6.3 -Scope and Refusal

No interview is conducted in cases where the <u>household</u> is out of the <u>scope</u> of the survey. A household is out of scope if any of the following apply.

- i) There is no informant who can speak English.
- ii) All the household members are non-Australians and are either diplomats or service personnel.
- iii) All the household members are <u>not</u> usual residents at the address.

If the selected <u>respondent</u> proves to be out of scope then a new respondent is selected using the respondent selection table. This is done by crossing the out-of-scope person off the list on the contact record and re-numbering the others on the list. Then the table is consulted as usual with the 'Number of Eligible Members' reduced by 1. If the person on the list on the contact record corresponding with the selected number is in scope, then that person is the respondent and should be interviewed. A selected respondent is deemed to be out of scope if he/she:

- i) Is not aged 18 years or over at date of approach.
- ii) Does not have an adequate command of English.
- iii) Is a non-Australian <u>and</u> either a diplomat or a serviceperson.
- iv) Is not a usual resident at the address.
- v) Is too infirm to be interviewed.
- vi) Is non-contactable (i.e., will not be home at all during the survey period).

If either the household or the selected respondent proves to be out of scope then interviewers are to record the details on the contact record sheet.

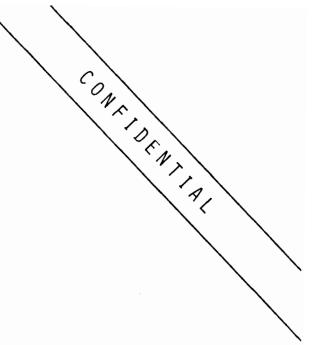
A <u>refusal</u> occurs in cases where the person at the door (the informant) refuses to co-operate in respondent selection, or where the selected respondent refuses to be interviewed. Interviewers will be trained in methods of handling refusals. Details of the refusal are to be noted on the contact record sheet.

6.4 Note on Adherence to Scientific Procedures

The success of a survey depend on the accuracy and reliability of the data collected, and this depends on rigorous adherence to scientifically established principles. It is necessary to assume that the information collected in the survey is truly representative of the attitudes, opinions and feelings of all the residents in the community. For such an assumption to be justified the survey procedures outlined above have to be followed to the letter by every interviewer. Variations which may seem insignificant can result in massive inaccuracies in the data and thereby render the survey invalid. Please seek clarification if you are at all unsure of any aspect of these procedures.

APPENDIX. THE INTERVIEW SCHEDULE

This section contains a copy of the interview schedule to be administered in the survey. It includes both forms of question 37 on page 14 (See Section 5.3) and a copy of the Contact Record following page 16.





AUSTRALIAN GOVERNMENT COMMUNITY SURVEY

ANSS - (1980)

Workload Number Addre	ess Code
Respondent's Address:	Office
Start: Date: / /80 Time: Finish:	No. (2)
Interviewer's Name:	

1.	THE FIRST QUESTION IS: HOW MANY YEARS HAVE YOU BEEN LIVING AT THIS ADDRESS?	Less than 1 year 1 1 - 2 years 2 2 - 5 years 3 5 - 10 years 4 More than 10 years 5 All of life 6 Don't know 0	(8)
3.	HOW WOULD YOU RATE THIS NEIGHBOUR-HOOD OVERALL AS A PLACE TO LIVE? IS IT VERY GOOD, FAIRLY GOOD, AVERAGE, FAIRLY BAD OR VERY BAD? (Show Card A) WHAT ARE SOME OF THE THINGS YOU LIKE ABOUT LIVING IN THIS NEIGHBOURHOOD? IS THERE ANYTHING ELSE YOU WOULD CONSIDER AN ADVANTAGE OF LIVING AROUND HERE?	Very good 1 Fairly good 2 Average 3 Fairly bad 4 Very bad 5 Don't know 0 Office Q OR 3 DK 0	(10)
4.	WHAT ARE SOME OF THE THINGS YOU DISLIKE ABOUT LIVING IN THIS NEIGHBOURHOOD? IS THERE ANYTHING ELSE YOU WOULD CONSIDER A DISADVANTAGE OF LIVING AROUND HERE?	Office AN 1 ON 2 S 3 OR 4 DK 0	(11)

5.	NOW I WOULD LIKE TO ASK YOU A FEATURES. USING THIS SCALE A RATING FOR EACH ACCORDING TO NEIGHBOURHOOD IS LIKE. FIRSTLY, WOULD YOU RATE THIS FAIRLY GOOD, AVERAGE, FAIRLY TRANSPORT? WHAT ABOUT	AGAIN (Show Card A) PLE WHAT YOU PERSONALLY TH NEIGHBOURHOOD AS VERY BAD OR VERY BAD FOR PU	CASE GIVE A HINK THIS GOOD,	
		Very Fairly good good Average	Fairly Very bad bad DK	
i)	PUBLIC TRANSPORT	1 2 3	4 5 0	(12)
ii)	SHOPPING CENTRES	1 2 3	4 5 0	
iii)	PARKS & PLAYGROUNDS	1 2 3	4 5 0	
iv)	AMOUNT OF POLLUTION	1 2 3	4 5 0	
v)	AMOUNT OF TRAFFIC	1 2 3	4 5 0	
vi)	COUNCIL & WATER RATES	1 2 3	4 5 0	
vii)	AMOUNT OF AIRCRAFT NOISE	1 2 3	4 5 0	
viii)	SCHOOLS & COLLEGES	1 2 3	4 5 0	
ix)	GENERAL SAFETY OF AREA	1 2 3	4 5 0	
6.	THESE FEATURES ARE LISTED ON	THIS CARD (Show Card E	3).	
	PLEASE READ THROUGH THEM AND	TELL ME WHICH ONE YOU	WOULD	
	MOST LIKE TO HAVE IMPROVED IN	THIS NEIGHBOURHOOD.		
	(Record: 1 - 9 Item number;	0 = DK)		(21)
7.	HOW WOULD YOU RATE YOUR HEALT	H? IN GENERAL,		
	WOULD YOU SAY YOUR HEALTH IS:	VERY GOOD,	Very good 1	
	FAIRLY GOOD, AVERAGE, FAIRLY	BAD OR VERY BAD?	Fairly good 2	
			Average 3	
	(Show Card A)		Fairly bad 4	(22)
			Very bad 5	·
			٠ ' ' ' '	

DK

8.	SOME PEOPLE FIND THAT THEIR HEALTH IS INFLUENCED BY CONDITION	ONS IN	7
	THEIR NEIGHBOURHOOD. FOR EXAMPLE, THEY MAY GET HEADACHES, H	HAVE	
	ALLERGY PROBLEMS, FEEL TIRED AND IRRITABLE, AND SO ON.		
	IS THERE ANYTHING ABOUT LIVING IN THIS	Yes 🔲 1	
	NEIGHBOURHOOD THAT YOU THINK MIGHT HAVE	No 2	(23)
	INFLUENCED YOUR HEALTH IN ANY WAY?	"" 另 "	(23)
		DK 0	
	<pre>If yes:</pre>		
A.	WHAT IS IT?		
	IS THERE ANYTHING ELSE ABOUT LIVING IN THIS		
	NEIGHBOURHOOD THAT HAS INFLUENCED YOUR HEALTH?		
		Office	
			(24)
в.	IN WHAT WAY HAS THIS INFLUENCED YOUR HEALTH?		
		Office	
			(25)
		L	

9.	I HAVE A LIST OF ENVIRONMENTAL CONDITIONS FOUND IN SOME NEIGHBOURHOODS.	
	PLEASE SAY WHETHER YOU THINK THESE CONDITIONS IN THIS AREA MIGHT HAVE	
	INFLUENCED YOUR HEALTH IN ANY WAY. THE FIRST ONE IS	
	(If yes - Probe: IN WHAT WAY HAS	
	THIS INFLUENCED YOUR HEALTH?)	
	Yes No DK	
i)	POLLUTION FROM FACTORIES 1 2 0	(2
i	If yes:	
	IN WHAT WAY?	
11)	TRAFFIC EXHAUST FUMES 1 2 0	
	If yes:	
	IN WHAT WAY?	
iii)	AIRCRAFT NOISE	
	If yes:	
	IN WHAT WAY?	
iv)	INDUSTRIAL WASTE	
	If yes:	
	IN WHAT WAY?	
	MDARRIC NOICE	
"		
	If yes:	
	IN WHAT WAY?	
vi)	OTHER CONDITIONS (Specify) 1 2 0	
	If yes:	
	IN WHAT WAY?	

10.	THE NEXT QUESTION DEALS WITH EVERYDAY THINGS THAT MANY PEOPLE ANNOYING, THINGS THAT GET ON THEIR NERVES. FOR EACH OF THE SITUATION OF THE SITU	SITUATIONS SIVE A OT).	
	HIGH RATING (SAY 9 OR 10), IF YOU FEEL MODERATE ANNOYANCE GIV	E IT A	
	RATING AROUND 5, AND IF YOU FEEL LITTLE OR NO ANNOYANCE GIVE	IT A	
	LOW RATING AROUND 0. PLEASE BASE YOUR RATING ON YOUR OWN PER	RSONAL	
	EXPERIENCE AND DISREGARD HOW OTHERS MIGHT FEEL.		ŧ
	FIRSTLY, HOW MUCH ANNOYANCE DO YOU FEEL WHEN?		
	(Record: 00-10 = Rating; 11 = Don't Know; 12 = Never Experie	nced)	
i)	YOU ARE HELD UP IN TRAFFIC		(38)
ii)	YOU ARE WOKEN UP BY A DOG BARKING		
iii)	AN UNANSWERED TELEPHONE KEEPS ON RINGING		
iv)	YOU ARE UNABLE TO FIND A SPACE IN A CAR PARK		
v)	SOMEONE IS READING OVER YOUR SHOULDER		
vi)	YOU ARE TRYING TO CONCENTRATE IN NOISY SURROUNDINGS		
vii)	A PERSON NEVER STOPS COMPLAINING		
viii)	SOMEONE PUSHES IN AHEAD OF YOU IN A QUEUE		
ix)	SOMEONE USES A MOTOR MOWER WHILE YOU ARE RESTING		
x)	YOU SMELL VEHICLE EXHAUST FUMES		
xi)	YOU HEAR A JET PASSING OVERHEAD		
xii)	YOU HAVE TO STAND UP ON PUBLIC TRANSPORT		
xiii)	YOUR CONVERSATION IS INTERRUPTED BY TRAFFIC NOISE		
xiv)	YOU SEE LITTER IN A PUBLIC PARK		
xv)	A NEIGHBOUR'S RADIO OR TV IS PLAYING LOUDLY		
xvi)	YOU FIND A PUBLIC TELEPHONE OUT-OF-ORDER		

11.	COULD YOU PLEASE TELL ME HOW MANY DAYS PER WEEK YOU ARE USUALLY AT	
	HOME IN THE MORNING. COUNT ALL DAYS INCLUDING WEEKENDS	
<u> </u> 	AND HOW MANY AFTERNOONS ARE YOU USUALLY AT HOME?	
	AND FINALLY, HOW MANY EVENINGS ARE YOU USUALLY AT HOME?	
ļ 1	(Record: $0-7 = Days$ at home; $9 = DK$)]
	Morning	(70)
	Afternoon	
	Evening [
12.	BY THE WAY, HAD YOU HEARD ABOUT THIS Yes 1	
	SURVEY BEFORE?	(73)
		(/3/
	DK 0	
	If yes: WHAT HAD YOU HEARD? Office	
		(74)
13.	THIS SURVEY IS GENERALLY INTERESTED IN ALL NEIGHBOURHOOD CONDITIONS,	
	BUT IN PARTICULAR WE ARE INTERESTED IN THE VARIOUS KINDS OF NOISE	
	PEOPLE HEAR IN DIFFERENT AREAS OF AUSTRALIA.	
	WHAT ARE THE KINDS OF NOISE YOU HEAR IN THIS NEIGHBOURHOOD?	
	ARE THERE ANY OTHER KINDS OF NOISE YOU HEAR IN THIS AREA?	
	Office	
		(75)
		i

14.	I HAVE A LIST OF NOISES HER						TOI
	YOU EVER HEAR THE FOLLOWING	NOISES	IN THIS N	NEIGHBOU:	RHOOD?	0.15	
		Yes	No	DK		Annoyance	
i)	TRAFFIC	1	2	0	(76)		(12)
ii)	LAWN MOWERS	1	2	0			
iii)	AIRCRAFT	1	2	0			
iv)	DOGS & CATS		2	0			
v)	ROAD WORKS	1	2	0			
vi)	TRAINS	1	2		(8)		
vii)	NEIGHBOURS' TV OR RADIO	1	2	0			
viii)	GARBAGE COLLECTION	1	2	0			
ix)	OTHER NOISES (Specify)	1	2	0			
15.	I WILL READ THROUGH THE LIS	T AGAIN	. THIS T	ME PLEA	SE USE	THE OPINIO	ON
	THERMOMETER TO RATE HOW MUCH ANNOYANCE YOU FEEL ABOUT THESE NOISES IN						
	THIS NEIGHBOURHOOD. BASE YOUR RATING ON YOUR OWN PERSONAL EXPERIENCE.						
	FIRSTLY, HOW MUCH ANNOYANCE DO YOU FEEL ABOUT NOISE FROM?						
	(Read only the items that ras previously)	eceived	a 'yes'	cesponse	in Q.	14 and reco	ord
16.	SUPPOSE YOU COULD GET RID C	F ONE O	F THESE NO	DISES FR	OM THE	NEIGHBOUR	HOOD,
	WHICH ONE WOULD YOU MOST LI	KE TO G	ET RID OF	?			
	(Show Card C)						
	(Record: 1-9 = Item number	0 = D	<u>K</u>)			[
17.	THIS SURVEY IS PARTICULARLY	INTERE	STED IN HO	OW PEOPL	E ARE	AFFECTED BY	2
	AIRCRAFT NOISE.						
	WOULD YOU PLEASE USE THE OP	INION T	HERMOMETE	R TO EST	IMATE	HOW MUCH YO	שכ
	PERSONALLY ARE AFFECTED BY	AIRCRAF	T NOISE O	ÆRALL.			
	(<u>Record</u> : 00-10 = Rating; 1	1 = DK)					
1							

NOTE: Interviewers to complete						
If a zero rating was given in the previous question skip to						
ļ	question 37. Otherwise continue with next quest	ion.				
		\$	Skip		(33)	
		(Continue			
18.	FOR EACH OF THE FOLLOWING ACTIVITIES PLEASE TELL M	E WHETHE	R OR			
İ	NOT YOU FIND THAT THEY ARE DISTURBED BY AIRCRAFT N	OISE.				
	FIRSTLY, DO YOU FIND THAT AIRCRAFT NOISE IN THIS N	EIGHBOUR	HOOD			
	DISTURBS CONVERSATION?					
	WHAT ABOUT?					
		Yes	No	DK		
i)	CONVERSATION	1	2	0	(34)	
ii)	WATCHING TELEVISION (i.e., TV FLICKER)	1	2	0		
iii)	LISTENING TO TV, RADIO OR MUSIC	1	2	0		
iv)	SLEEPING	1	2	0		
v)	RELAXING	1	2	0		
vi)	READING OR STUDYING	1	2	0		
vii)	ENTERTAINING	1	2	0		
viii)	OTHER (Specify)	1	2	0		
19.	SUPPOSE YOU COULD ELIMINATE THE DISTURBANCE AIRCRA	FT NOISE	CAUSES			
	TO ONE OF THESE ACTIVITIES, WHICH ONE WOULD YOU $\underline{\text{MO}}$	ST LIKE T	O HAVE			
	FREE FROM DISTURBANCE?					
	(Show Card D)					
	(Record: $1-8 = Item number; 0 = DK$)]	(42)	
20.	HOW MUCH ANNOYANCE DO YOU FEEL OVERALL BECAUSE OF ACTIVITY DISTURBANCES CAUSED BY AIRCRAFT NOISE?					
	PLEASE USE THE OPINION THERMOMETER TO GIVE A RATIN ANNOYANCE.	G OF YOU	R			
	(Record: 00-10 = Rating; 11 = Don't Know)				(43)	

21. DO YOU FIND THAT AIRCRAFT MAKE THIS HOUSE (UNIT) VIBRATE OF	R SHAKE?	
Ye	es 1	
No	2	(45)
Dk		
22. DO YOU FIND THAT AIRCRAFT NOISE STARTLES YOU OR MAKES YOU J	IUMP?	
Υe	es 🔲 1	
No	2	(46)
Dk		
23. USING THE OPINION THERMOMETER AGAIN WOULD YOU PLEASE ESTIMA	ATE HOW	
MUCH YOU FEEL FRIGHTENED OR WORRIED BY AIRCRAFT NOISE.		
(Record: 00-10 = Rating; 11 = DK)		(47)
24. A. I WOULD LIKE TO FIND OUT WHAT IT IS THAT BOTHERS PEOPLE A	ABOUT	
THE NOISE THAT AIRCRAFT MAKE. PLEASE SAY WHETHER OR NOT	YOU	
ARE BOTHERED BY ANY OF THE FOLLOWING THINGS.		
FIRSTLY ARE YOU BOTHERED BY?		
Yes	No DK	
i) THE LOUDNESS OF THE NOISE	2 0	(49)
ii) THE LOW ROARING SOUND OF THE ENGINES	2 0	
iii) THE HIGH-PITCHED WHINE OF THE ENGINES	2 0	
iv) THE TIME THE PLANE TAKES TO PASS OVER 1	2 0	
v) CHANGES IN THE SOUND OF THE ENGINES 1	2 0	
B. IS THERE ANYTHING ELSE ABOUT THE SOUND OF		
THE AIRCRAFT THAT BOTHERS YOU?	Office	
	51116	

2.	5. SOME PEOPLE FIND THAT THEIR HEALTH IS INFLUENCED BY			
	AIRCRAFT NOISE. FOR EXAMPLE, THEY MAY GET HEADACHES	,		
	FEEL TIRED AND IRRITABLE, AND SO ON.			
	DO YOU THINK THE AIRCRAFT NOISE IN THIS NEIGHBOURHOOM	D		
	MIGHT HAVE INFLUENCED YOUR HEALTH IN ANY WAY?	Yes	\bigcap 1	
			光 。	/
		No	<u> </u>	(55)
		DK	0	
	If yes: A. IN WHAT WAY HAS AIRCRAFT NOISE			
	INFLUENCED YOUR HEALTH?			
		9	Office	
				(56)
	B. PLEASE USE THE OPINION THERMOMETER TO			ŀ
	ESTIMATE HOW MUCH YOUR HEALTH HAS BEEN			
	AFFECTED BY AIRCRAFT NOISE.			}
	(Record: 00-10 = Rating; 11 = DK)			(57)
	(Records to 10 Records 12 Dr.)			(37)
2	6. WHAT DO YOU THINK AFFECTS HOW YOU FEEL ABOUT			
	AIRCRAFT NOISE? IS IT THE NOISIEST PLANE YOU	Noisiest		
	HEAR, OR IS IT THE STEADY BUILD-UP OF ALL THE	Build-up	<u></u>	
	PLANES YOU HEAR IN A DAY, OR WOULD YOU SAY	Found 1	占₃	(59)
	THESE TWO ASPECTS AFFECT YOU EQUALLY.	Equal	工。	
		DK	□ °	
-				
2	7. SUPPOSE YOU WERE ABLE TO HAVE AIRCRAFT STOPPED			
	FROM FLYING OVER IN ONE OF THESE 3-HOUR PERIODS			
	(Show Card E), WHICH ONE WOULD YOU MOST LIKE TO			
	HAVE FREE FROM AIRCRAFT NOISE?			
	(Record: $1-8 = Period; 0 = DK$)			(60)
<u> </u>				
2	3. DO YOU HEAR THE NOISE OF PLANES WHEN THEY ARE	Yes	1	
	AT THE AIRPORT ITSELF, AS DISTINCT FROM FLYING	No	\prod_{2}	(61)
	OVERHEAD?		日	, = = /
		DK		

29.	HAVE YOU OR YOUR FAMILY EVER TRIED TO DO ANYTHING TO HAVE THE AIRCRAFT NOISE REDUCED IN THIS NEIGHBOURHOOD?		Yes No DK	1 2 0	(62
	If yes: WHAT DID YOU DO?		<u>of</u>	fice	(63
	If no: IS THERE ANY PARTICULAR REASON YOU HAVEN'T TRIED TO DO ANYTHING?		<u>0f</u>	fice	(64
30.	I HAVE A LIST OF SOME OF THE THINGS PEOPLE DO TO CONDITIONS IMPROVED IN THEIR NEIGHBOURHOODS. FOR WHETHER OR NOT YOU WOULD LIKE TO DO ANY OF THESE IN RELATION TO AIRCRAFT NOISE. FIRSTLY, DO YOU WOULD LIKE TO SIGN A PETITION? WHAT ABOUT.	PLEASE SAY SE THINGS U FEEL YOU			
ii) iii) iv) v) vi) vii)	SIGN A PETITION COMPLAIN TO LOCAL OFFICIALS COMPLAIN TO YOUR MEMBER OF PARLIAMENT WRITE A LETTER TO THE EDITOR ATTEND A MEETING OF NEIGHBOURS ATTEND A PROTEST RALLY BECOME A MEMBER OF A PROTEST GROUP TAKE SOME KIND OF LEGAL ACTION	Yes 1 1 1 1 1 1 1 1 1 1 1 1 1	No 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		(65
NOTE	: Omit next question (Q.31) if response to Q.1	was "all o	f life".		

31.	DID YOU KNOW ABOUT THE AIRCRAFT NOISE IN THIS NEIGHBOURHOOD BEFORE YOU MOVED HERE?	Yes No DK	1 2 0	(73)
	If yes: IS THE AIRCRAFT NOISE IN THIS AREA DIFFERENT FROM WHAT YOU EXPECTED? IS IT MUCH MORE, A BIT MORE, ABOUT THE SAME, A BIT LESS OR MUCH LESS THAN YOU EXPECTED BEFORE YOU MOVED HERE? (Show Card F)	Much more A bit more About the same A bit less Much less DK	1 2 3 4 5	(74)
	If "more", or if "no" to first part: DO YOU THINK YOU WOULD HAVE STILL MOVED HERE HAD YOU KNOWN HOW MUCH AIRCRAFT NOISE THERE WOULD BE?	Yes No DK	1 2 0	(75)
32.	DO YOU THINK YOU HAVE BECOME USED TO AIRCRAFT NOISE IN THE TIME YOU HAVE BEEN LIVING IN THIS NEIGHBOURHOOD?	Yes No DK] 1 2 0	(76)
33.	HAS THE AMOUNT OF AIRCRAFT NOISE IN THIS NEIGHBOURHOOD CHANGED OVER THE PAST FIVE YEARS (If less than 5 years say: SINCE YOU MOVED HERE)? IS IT MUCH MORE, A BIT MORE, ABOUT THE SAME, A BIT LESS OR MUCH LESS THAN IT WAS BEFORE?	Much more A bit more About the same A bit less Much less DK	1 2 3 4 5 0	(77)

34.	HAVE YOU EVER SERIOUSLY CONSIDERED MOVING FROM THIS NEIGHBOURHOOD BECAUSE OF THE AIRCRAFT NOISE?	ì	Yes No OK	1 2 0	(78)
	If yes: WHAT SORT OF REASONS DID YOU HAVE FOR DECIDING NOT TO LEAVE?				(79)
	If no: DO YOU THINK YOU WOULD SERIOUSLY CONSIDER MOVING IF THE AMOUNT OF AIRCRAFT NOISE INCREASED IN THE FUTURE?	4	res No OK] 1] 2] 0	(80)
35.	HAVE YOU EVER THOUGHT THAT THERE IS A DANGER THAT A PLANE MIGHT CRASH IN THIS NEIGHBOURHOOD?	И	res No OK	1 2 0	(8)
	<pre>If yes: USING THE OPINION THERMOMETER WOULD YOU PLEASE ESTIMATE HOW MUCH YOU FEEL AFRAID OF WORRIED ABOUT A POSSIBLE PLANE CRASH IN TH NEIGHBOURHOOD. (Record: 00-10 = Rating; 11 = DK)</pre>				(9)
36.	HOW WOULD YOU DESCRIBE YOUR GENERAL FEELIN NOISE IN THIS NEIGHBOURHOOD? WOULD YOU SA		ŒD	1 2 3	
	(Show Card G)	SLIGHTLY ANNOYED NOT AT ALL ANNOYED (DK)		4 5 0	(11)

			٠.		
NOTE: In case of 'SKIP' resume interview with next question (Q.37).					
37. i)			(12		
ii)	AIRCRAFT NOISE IS REALLY NOT MUCH OF A PROBLEM.	5 4 3 2 1 0	Ė		
iii)	PILOTS DO THEIR BEST TO KEEP THE NOISE DOWN WHEN FLYING OVER RESIDENTIAL AREAS.	5 4 3 2 1 0			
iv)	MOST PEOPLE WHO COMPLAIN ABOUT AIRCRAFT NOISE ARE JUST TROUBLEMAKERS.	5 4 3 2 1 0			
v)	THE GOVERNMENT HAS NO REAL CONCERN FOR PEOPLE AFFECTED BY AIRCRAFT NOISE.	5 4 3 2 1 0			
vi)	AIRPORT OFFICIALS ARE CONTINUALLY TRYING TO FIND WAYS OF REDUCING AIRCRAFT NOISE DISTURBANCE TO RESIDENTS.	5 4 3 2 1 0			
vii)	IT IS NO USE COMPLAINING ABOUT AIRCRAFT NOISE BECAUSE NO ONE WILL EVER DO ANYTHING ABOUT IT.	5 4 3 2 1 0			
viii)	WHATEVER THE INCONVENIENCE TO AIRLINES THERE SHOULD BE MORE RESTRICTIONS ON AIRCRAFT FLIGHTS OVER RESIDENTIAL AREAS.	5 4 3 2 1 0			
ix)	AIRLINES DO NOT CARE ABOUT THE DISRUPTION CAUSED BY AIRCRAFT NOISE.	5 4 3 2 1 0			
x)	AIRCRAFT MANUFACTURERS SPEND A LOT OF MONEY TRYING TO REDUCE THE NOISE				

OF AIRCRAFT ENGINES.

NOTE	NOTE: In case of 'SKIP' resume interview with next question (Q.37).					
37. i)	I WOULD LIKE TO ASK ABOUT YOUR GENERAL NOISE. I WILL READ OUT A NUMBER OF SEWOULD YOU PLEASE USE THIS CARD (Show STRONGLY AGREE, AGREE, ARE UNDECIDED, THE FIRST STATEMENT IS: THE AIRFORCE BASE SHOULD BE MOVED TO AN AREA WHERE THERE ARE NO HOUSES.	Card H) TO INDICATE WHETHER YOU: DISAGREE OR STRONGLY DISAGREE. SA A U D SD DK 5 4 3 2 1 0	(12			
ii)	AIRCRAFT NOISE IS REALLY NOT MUCH OF A PROBLEM.	5 4 3 2 1 0				
iii)	PILOTS DO THEIR BEST TO KEEP THE NOISE DOWN WHEN FLYING OVER RESIDENTIAL AREAS.	5 4 3 2 1 0				
iv)	MOST PEOPLE WHO COMPLAIN ABOUT AIRCRAFT NOISE ARE JUST TROUBLEMAKERS.	5 4 3 2 1 0				
v)	THE GOVERNMENT HAS NO REAL CONCERN FOR PEOPLE AFFECTED BY AIRCRAFT NOISE.	5 4 3 2 1 0				
vi)	BASE OFFICIALS ARE CONTINUALLY TRYING TO FIND WAYS OF REDUCING AIRCRAFT NOISE DISTURBANCE TO RESIDENTS.	5 4 3 2 1 0				
vii)	IT IS NO USE COMPLAINING ABOUT AIRCRAFT NOISE BECAUSE NO ONE WILL EVER DO ANYTHING ABOUT IT.	5 4 3 2 1 0				
viii)	WHATEVER THE INCONVENIENCE TO THE AIRFORCE THERE SHOULD BE MORE RESTRICTIONS ON AIRCRAFT FLIGHTS OVER RESIDENTIAL AREAS.	5 4 3 2 1 0				
ix)	THE AIRFORCE DOES NOT CARE ABOUT THE DISRUPTION CAUSED BY AIRCRAFT NOISE.	5 4 3 2 1 0				
x)	AIRCRAFT MANUFACTURERS SPEND A LOT OF MONEY TRYING TO REDUCE THE NOISE	5 4 3 2 1 0				

OF AIRCRAFT ENGINES.

38.	88. HOW <u>DISSATISFIED</u> ARE YOU WITH THE AMOUNT OF AIRCRAFT NOISE IN THIS NEIGHBOURHOOD?				
	PLEASE USE THE OPINION THERMOMETER TO ESTIMATE HOW MUCH DISSATISFACTION YOU FEEL OVERALL.				
	(Record: 00-10 = Rating; 11 = DK)	(22			
39.	ARE THERE ANY OTHER COMMENTS YOU WOULD LIKE TO MAKE ABOUT AIRCRAFT NOISE OR ABOUT ANY OTHER ASPECT OF LIVING IN THIS NEIGHBOURHOOD?				
40.	FINALLY, I NEED TO GET SOME BACKGROUND INFORMATION FOR STATISTICAL PURPOSES.				
	WOULD YOU PLEASE INDICATE YOUR AGE GROUP 18-29 yrs 1				
	FROM THE CATEGORIES ON THIS CARD. 30-39 yrs 2				
	(Show Card I) 40-49 yrs 3				
	50-59 yrs 4				
	60-69 yrs 5	(24)			
	Over 70 yrs 6				
	Refuse 7				
41.	WHAT IS YOUR OCCUPATION?				
		(25)			
42.	Interviewers to complete				
	Sex of Respondent Female 2	(26)			

				1
43.	FROM THIS CARD (Show Card J) PLEASE TELL	1 - 3 yrs Primary	1	
	ME WHAT IS THE HIGHEST LEVEL OF EDUCATION YOU HAVE COMPLETED?	4 - 6 yrs Primary	2	
		1 - 4 yrs Secondary	3	
		5 - 6 yrs Secondary	4	
		1 - 2 yrs Tertiary	5	(27)
		3 + yrs Tertiary	6	
		Refuse	7	
		DK	o	
	If Tertiary:			
	COULD YOU PLEASE TELL ME THE NAME OF			
	THE TERTIARY INSTITUTION YOU ATTENDED?	<u>c</u>	ffice	
				(28)
44.	DO YOU OR YOUR FAMILY OWN THIS HOUSE (UNIT), ARE YOU BUYING IT OR DO YOU RENT IT?	Own		
	AND TOO BOTTHO IT ON BO TOO NEW! IT!	Buying	<u> </u>	(29)
		Renting	□ 3	(29)
		DK or other		
45.	Interviewers to complete			
	Type of dwelling	House	_ 1	
		Semi-detached		
		Villa-home	3	(30)
		Topfloor Unit	4	
		Other Unit	_ 5	
		Other dwelling	6	

WORKLOAD NO.		C	CONTACT	RECORD	a		SCHE	DULE NO.
			00111101	1200.0	J			
ADDRESS: Code] _							-
		НО	USEHOLD]	RESPONDENT	
Call No.	lst Call	2nd Call	3rd Call	4th Call		lst Call	2nd Call	3rd Call
Date								
Time								
Contact (√/x)								
Successful? Yes No	If no Explai		Contact		Refusal		Beyond Sco	ре

GOOD MORNING/AFTERNOON/EVENING, I'M ... (HERE'S MY IDENTIFICATION).

THIS ADDRESS HAS BEEN SELECTED IN AN OFFICIAL SURVEY THE AUSTRALIAN GOVERNMENT IS CONDUCTING ON NEIGHBOURHOOD LIVING CONDITIONS.

THE INFORMATION IS QUITE CONFIDENTIAL, AND WILL BE USED FOR PLANNING FUTURE COMMUNITY IMPROVEMENTS.

I NEED TO INTERVIEW ONLY ONE PERSON FROM THIS HOUSEHOLD, BUT THE PERSON TO BE INTERVIEWED HAS TO BE SELECTED RANDOMLY.

YOU CAN HELP BY FIRSTLY TELLING ME HOW MANY PEOPLE LIVE IN THIS HOUSEHOLD. NOW I NEED TO KNOW HOW MANY OF THEM ARE AGED 18 OR OVER. COULD YOU PLEASE TELL ME WHO THEY ARE?

Person Number	Relationship to informant	Sex (Circ		Age
1		М	F	
2		М	F	
3		М	F	
4		М	F	
5		М	F	
6		М	F	
7		М	F	